

### REMARKS

In the Final Office Action, the rejection of claims 1-22 was maintained under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,995,930 to Hab-Umbach et al. ("Hab").

The Examiner contends that the limitations on which Applicants rely are not stated in the claims. In particular, Examiner contends that (i) the limitation of generating synthetic waveforms for each of the N-best decoded sequences is not stated in the claims; and that (ii) the recitation of re-scoring an N-best hypothesis generated by a speech recognition system should not be given patentable weight because the recitation occurs in the preamble. Applicants strongly disagree with Examiner's conclusions.

For instance, with respect to contention (i), the Examiner is directed to claims 1, 9 and 15 wherein claims 1 and 9 explicitly recite "generating a synthetic waveform for each of the N text sequences" in the body of the claim, and wherein claim 15 explicitly recites "a waveform generator for generating a synthetic waveform for each of the N-text sequences" in the body of the claim.

Next, with respect to contention (ii), Examiner cites Constant v. Advanced Micro Devices Inc. for the proposition that it is the claims that define the invention, and not the specification. It is respectfully submitted that Examiner's reliance on Constant is misplaced. Indeed, Applicants are not relying on the specification to read limitations in the claims, but rather Applicants are relying on the specific language of the claims. Thus, Constant is not even remotely applicable.

Further, Examiner cites In re Hirao for the proposition that a preamble is not generally accorded any weight. However, Examiner's argument is contradicted by what Examiner states In re Hirao stands for because In re Hirao stands for the proposition that a preamble should be given weight *when the body of the claim depends on the preamble for completeness*.

Indeed, as set forth in MPEP 2111.02, *if the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is necessary to give life, meaning and vitality to the claim, then the claim preamble should be construed as if in the balance of the claim* (citing Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1305).

Based on the above, it is clear that all limitations upon which Applicants rely for distinguishing the cited reference Hab are recited in the claims. For convenience of reference, the independent claims 1, 9 and 15 are set forth below:

1. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for rescoring N-best hypotheses of a decoded original waveform output from an automatic speech recognition system, the N-best hypotheses comprising N text sequences, the method steps comprising:
  - generating a synthetic waveform for each of the N text sequences;
  - comparing each synthetic waveform with the original waveform to determine the synthetic waveform that is closest to the original waveform; and
  - selecting for output the text sequence corresponding to the synthetic waveform determined to be closest to the original waveform.

9. A method for rescoring N-best hypotheses of a decoded original waveform output from an automatic speech recognition system, the N-best hypotheses comprising N text sequences, the method comprising the steps of:

- generating a synthetic waveform for each of the N text sequences;
- comparing each synthetic waveform with the original waveform to determine the synthetic waveform that is closest to the original waveform; and
- selecting for output the text sequence corresponding to the synthetic waveform determined to be closest to the original waveform.

15. An automatic speech recognition system, comprising:  
a decoder for decoding an original waveform of acoustic utterances to produce N text sequences, the N text sequences representing N-best hypotheses of the decoded original waveform;

- a waveform generator for generating a synthetic waveform for each of the N text sequences;

- a comparator for comparing each synthetic waveform with the original waveform to rescore the N-best hypotheses.

The body of claims 1 and 9 set forth element steps for performing the *method of rescoring N-best hypotheses of a decoded original waveform output from an automatic speech recognition system*. In addition, the preamble provides antecedent basis for the N-text sequences in the body by reciting *the N-best hypotheses comprising N text sequences* in the preamble.

Taken as a whole, each limitation upon which Applicants rely to distinguish Hab is expressly set forth in claims 1 and 9.

Moreover, with respect to claim 15, all elements that Applicants rely upon to distinguish Hab is set forth in the body of the claim 15. Thus, Examiner's arguments regarding limitations being in the preamble are not even applicable to claim 15.

Now, with respect to the rejection of claims 1, 9 and 15 (and claims that depend therefrom) in view of Hab, Applicants respectfully reassert, and hereby incorporate by reference, the arguments set forth in their previous response distinguishing Hab. Indeed, Hab is not even remotely related to a protocol for re-scoring an N-best hypothesis generated by a speech recognition system, much less a method for rescoring that comprises generating a synthetic waveform for each of the N-best text sequences and comparing each of the synthetic waveforms to the original file to select one of the N-best hypotheses.

Accordingly, the withdrawal of the rejections under 35 U.S.C. § 102(e) is respectfully requested.

Early and favorable consideration by the Examiner is respectfully urged. Should the Examiner believe that a telephone or personal interview may facilitate resolution of any remaining matters, it is requested that the Examiner contact Applicants' undersigned attorney.

Respectfully submitted,



Frank DeRosa

Reg. No. 43,584

Attorney for Applicant(s)

F. Chau & Associates, LLP  
1900 Hempstead Tnpk.  
East Meadow, NY 11553  
TEL.: (516) 357-0091  
FAX: (516) 357-0092